Action Plan for Deploying Broadband Internet to Michigan Local Governments



Provided by the Michigan Department of Information Technology

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Introduction

This reference guide was developed to assist local units of government and community interest groups with expediting the availability of high-speed broadband Internet.

Computing technology continues to evolve at an everincreasing pace. Enterprises are looking for ways to extend the reach of existing infrastructures and improve productivity by providing undeterred access to networks – at the office, from home, from anywhere around the world. Over 200 governments today are studying implementation of some form of WiFi technology. Responsible government leaders must evaluate the need for broadband in their community as a way to improve the quality of life for their residents. This transformational technology will help communities compete in the knowledge economy and revolutionize the way that people work, live and play.

As local community leaders, our constituents depend on us to facilitate services and programs that enhance local quality of life issues. Affordable broadband access to the Internet has become essential for nearly every aspect of our lives today, and the future benefits that high-speed broadband brings to local communities are key to overcoming many governmental, economic, social, and educational challenges.

This reference guide serves as an introduction to broadband Internet and some of the technologies available to help deploy high-speed Internet throughout your community. This guide and the step-by-step checklist in Appendix A will help local government officials:

- Understand types of broadband and terminology
- Develop goals for building a broadband network
- Identify stakeholders and community champions
- Develop asset lists and collect data
- Identify potential partners to leverage existing infrastructure
- Follow business models
- Build community consensus
- Fund broadband projects



- Talk about request for proposals (RFP)
- Develop questions to ask an Internet service provider

Building a local action plan is not easy or done overnight, and finding the right Internet Service Provider (ISP) could be a challenge. If you cannot find the best technology options you may still be able to find options to meet enough of your needs to justify deployment. The biggest challenge is how to pay for the broadband project. This reference guide will assist local leaders in making the best decision for your community.

Broadband Terminology

Bandwidth—Refers to the amount of data that can be transferred over a connection. Broadband connections typically range from at least 256 kilobytes per second to more than three megabytes per second. A typical phone line averages between 28 and 56 kilobytes per second.

BPL—Broadband over power lines. Allows broadband access through the use of electrical power lines.

Broadband—High-speed Internet connections where the most popular delivery methods include cable, DSL, fiber optics and wireless connections.

"Digital Divide"—The gap between those who have access to broadband technology and those who do not.

DSL—Digital subscriber lines. Provides digital broadband connections over a normal phone line.

Fiber Optics—Long, thin strands of glass used to transmit light impulses that carry data that can be read by computers. Fiber optic line is often used for high-speed Internet access.

FTTH—Fiber-to-the-home. A wired fiber line that directly connects computers and devices to broadband connections.

ISP—Internet service provider. A business or organization that offers access to the Internet and/or other Web-related services.

WISP—Wireless Internet service provider.

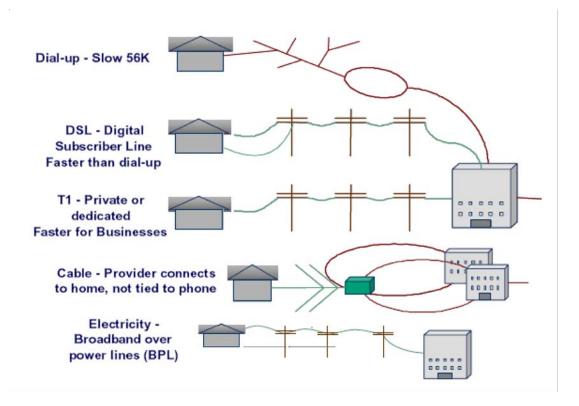
WiFi—Wireless Fidelity. Allows for wireless broadband access.



What is Broadband Internet?

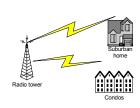
Broadband Internet is often referred to as "high speed Internet". It is usually delivered by connecting through your cable company, phone-company, or an Internet service provider. Broadband has become an industry standard in conducting business online, and has made its way into nearly half of all homes in the United States. Though every citizen has different needs for broadband service, we all share in the idea that it is important for our future.

Wired Technologies





Unwired Technologies



WiMax – An upcoming wireless alternative to DSL, cable, and T-1 lines – it has the potential to fill the broadband gaps in rural and metro areas. Currently only pre-WiMax products are available.



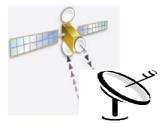
WiFi – Wireless local area networks (WLAN), commonly used in homes, business, hot-spots, emerging hot-zones. WiFi can be mobile, nomadic, portable, and an ubiquitous multipurpose broadband to a community at very low cost.

Cellular 3G (Third Generation) –

Initially a service targeted at mobile business users with laptops; speeds matching DSL and cable; remote, mobile access to the Internet using a variety of technologies.







Satellite — Available everywhere; relatively expensive install and monthly costs; throughput impacted by satellite delays; remains as the fallback solution.

Comparing Internet Speeds

These comparisons are changing as the technology shifts and increases bandwidth

	Dial-Up	Broadband	Broadband	Broadband	Broadband
	(56Kbps)	- DSL	- Wireless	- BPL	- T1
Web Page	28 Seconds	2 Seconds	4 Seconds	1 Second	1 Second
Picture (1MB)	2 Min. 2 Sec.	12 Seconds	55 Seconds	8 Seconds	5 Seconds
News Clip	23 Min. 15	2 Min. 5	9 Min. 15	1 Min. 30	52
(10MB)	Sec.	Sec.	Sec.	Sec.	Seconds

Source: State of Michigan, Office of Technology Partnerships



Why do Governments, Businesses, and Citizens need Broadband?

Government

Broadband Internet access can reduce the cost of government by improving efficiency, and by drastically improving the information available to public safety personnel and other mobile, municipal employees.

Broadband can help a local government stimulate economic development through its positive impact on the community's image and by encouraging affordable, innovative networked services for businesses and a more IT-literate population. It can bring citizens and government closer to each other, allowing easy and convenient participation for all, and it can play a key role in improving public services such as; health care, education, public safety, e-government, and more. Broadband will enhance these services by making them more efficient and convenient to use.

Businesses

Businesses will have the ability to globalize their operations, and reduce costs. Ordering and selling products via the Internet, real-time credit card transactions, more marketability and advertising, among others, are some advantages to having broadband Internet in your business. Having broadband will also open the door to many new business opportunities in your community.

Citizens

Increased educational opportunities, tele-commuting for work, career building, workforce development and online shopping, are all made more accessible with broadband Internet. Students will be able to research homework, or complete assignments from home, as well as attend colleges or universities via online courses. Access to posting your resume online, as well as free e-learning, is made available for work force development.



How to begin: Developing goals for building a broadband network

Community leaders need to begin by defining local broadband needs and those community needs will define the concepts and tools to use in meeting those needs. The first step communities need to take is to develop a focus group, to create goals for broadband development. Learning about the technologies, applications, funding models and how other communities are building projects is a very important part of the process.

Communities are actively pursuing broadband communications to:

- Improve public safety (police, fire and EMS)
- Increase government productivity
- Foster digital inclusion
- Improve educational opportunities
- Enhance economic development
- Enable advanced health care
- Encourage local tourism activity, and
- Blanket communities with remote wireless access

See Appendix B for more samples of how local governments are improving communities through broadband deployment projects.

Once you have defined the goals for providing broadband, the types of technology and amount of bandwidth required will give the project focus.

For example, if your main purpose for broadband development is to improve public safety, you will need a network that is ubiquitous, mobile, portable and provides at least 1 meg symmetrical service to enable such applications as mug shots, Amber Alerts, streaming video and building schematic access. However, if your main focus is providing broadband to business and residents, then fiber or fixed wireless may be an acceptable solution for your jurisdiction.

Community leaders also need to know what local Internet companies can provide. Not all ISPs can handle every type



of technology that may be required for your local area broadband network.

Who makes the decisions/potential partners

The next step in providing community broadband service is to identify "project champion(s)," either a local government staff member, consultant or someone from the community that wants to get involved. It's always good to get local stakeholders involved as well, to ensure the political viability of your project. A local government without knowledgable, full-time IT staff may want to hire a consultant to assist with developing a local action plan. Local elected officials should be encouraged to play a role in this phase of the plan. Local community volunteers can bring many resources to the table, and are a great asset to any government project. Interested stakeholders could include area business owners, hospitals, schools, downtown development districts, chambers of commerce, community organizations, and other surrounding local governments, to name a few.

Consider creating public and private partnerships and developing community support. Hold community meetings with sign-up sheets for creating a broadband task force. Consider a survey for your area residents and businesses to see how likely they would be to utilize the broadband services. Community support generated for your project will be key to its success in the end.

Get community consensus

Community support will help sell your project and build a collaborative spirit between the community, local businesses, and government officials. A local broadband committee of stakeholders should identify each segment of the community and promote the advantages of community broadband to those groups. Get the local media involved, create eye-catching brochures and flyers, and focus on bringing a measurable benefit to your community.



Gathering community information and data

Local governments have the ability to provide data needed to identify local community assets (towers, light poles, buildings, etc.) and other helpful information to determine the size of the network and how many customers will use it. Data collection is very important before making decisions on what type of broadband network requirements might be needed. Some types of information and data needs will include, but are certainly not limited to:

Size of the network (number of square miles)

Deciding how much area to cover depends on the goal of the broadband network. If the purpose is to enhance public safety, than your coverage area will need to be expanded out to the boundaries of your local government, and the technology will more than likely be wireless. If the goal is to provide more economic development in your downtown or business park, then a much smaller, networked area may be required. Most communities will have multiple goals for broadband networks including access for all citizens and will need to lay out a coverage area to encompass all of the project goals.

Area Internet service providers and local access

Inventory local ISPs and those that are in nearby communities. There is a good chance that expanding infrastructure a few miles may be easier than you thought. Get a map of your community and highlight which areas are covered, not covered and who is providing the access. Also note that local cable companies don't always provide wireless access to their networks and may only connect to the Internet through fiber-to-the-home (FTTH). Contact your local cable provider and see what options it offers for broadband access. Many areas of Michigan have spotty access to broadband and cable and local access to broadband networks may already have been developed. Many local universities, colleges, public schools, libraries, county governments, some larger businesses and hospitals already have access to broadband in many communities around the state. Check with these local institutions to see if sharing bandwidth is an option.



Inventory of public/private assets

Compile a list of all publicly owned assets. This includes land, buildings, utility poles, water and cell towers, public rights-of-way, cemeteries, parks, and other publicly held properties. Assets can be used to support broadband hardware such as wireless antennas and other network infrastructure and to trade with Internet service providers for free or reduced-rate government access to the network. Private assets from local agricultural businesses should also be included as potential sites for towers and antennas. Often, the local farming community will swap silos and grain elevators for free or reduced-rate broadband services. List all potential assets in your community regardless of who owns the property or towers. Also, be sure to check all local ordinances and policies that may restrict your access to local public assets. The clerk or ordinance enforcement officer in your local government should be able to assist you.

Household density

Knowing how many households you have per square mile in your coverage area will help ISPs and potential partners or investors understand the income potential of your community. U.S. Census data can be useful to help identify these numbers, and local assessors or building inspectors can also provide more data from records and new home or apartment builds. Local master plans may also provide estimated data on future building expansions and development in a community for future coverage and bandwidth concerns.

Survey the community for use and willingness to pay

Conduct a survey of your targeted market to decide what type of service they want and how much they are willing to pay for it. This will help later on when you are trying to determine what your monthly income might be. Internet service providers will also be able to help, as many use market formulas to determine service expansions and rates.



Building a broadband business model

Who should own the community broadband? Many different types of business models have been used by various communities around the country. National companies that provide networks and hardware for broadband projects highlight some of these models in published or sponsored "white papers," such as Intel's Digital Community Best Practices, and Earthlink's sponsored Effective Technology Due Diligence: The Key to Successful Muni Wireless Deployments.

Craig Settles, president of Successful.com, describes several business model options in Fighting the Good Fight for Municipal Wireless: Applying Lessons from Philadelphia's WiFi Story, his book which profiles Philadelphia's famous broadband initiative that sparked many digital government deployments here in the U.S.

According to Settles, there are various business model options that local governments can use. Some do not put the governments in the broadband business nor dip into tax dollars.

"As more governments get involved with muni WiFi, and as deployments finally go live, variations of these models are likely to emerge and some models will lose favor. Your city should select whichever one is best after weighing each option against the needs of your government, citizens and the political circumstances you face, then clearly articulate the particulars of that model so everyone understands what you're doing," said Settles.

These research papers and books showcase various business models that communities can model their own projects from and are listed in Appendix C .

The City of Grand Rapids recently developed the following business/funding models for their wireless project:

Business Model 1: Government-Owned and Operated The local government contracts, builds and pays for construction, maintenance and operation of the network.



Advantages:

- The local government has full control of the network, including access, priorities, security, expenditures, bandwidth, level of maintenance, charges for business, and public use, if granted.
- The local government keeps any revenue generated by the network.

Disadvantages:

- The local government is responsible for administration of the network including customer billing, installation, and assistance issues.
- The local government incurs any expense associated with the network including cost of building the network, staff, maintenance, and repair.
- Open to criticism for taking business opportunities away from private enterprise.

Business Model 2: Government-Owned and Privately Operated

Advantages:

- The local government controls of the network and has the option to "take it back" at any time.
- The local government receives free use of the network and/or receives revenue.
- The local government is not responsible for administration of the network, customer billing, installation, or assistance issues.
- The local government does not incur any expense associated with maintenance and repair.

Disadvantages:

- The local government must expend resources to build the network.
- The local government does not receive full revenue from business, residential, or public customers.



Business Model 3: Joint Authority Operated

Advantages:

- The local government does not incur any expense to build, repair, staff, or maintain the network.
- The network will exist for the public good without regard for private, for-profit interests.
- May involve regional area coverage through collaboration with the county and other local governments.

Disadvantages:

- Open to criticism for taking business opportunities away from private enterprise.
- Requires collaboration between multiple entities, potentially slowing the process.
- Removes control from the local government.
- Local government would likely be required to pay for use.
- Local government would not receive revenues.

Business Model 4: Non Profit Owned and Operated (by a 501(c) (3) corporation)

Advantages:

- The local government does not incur any expense to build, repair, staff, or maintain the network.
- The network will exist for the public good without regard for private, for profit interests.
- May involve regional area coverage through collaboration with the county and other local governments.

Disadvantages

- Time to form non profit will slow the process.
- Open to criticism for taking business opportunities away from private enterprise.
- Removes control from the local government.
- Local government would likely be required to pay for use.
- Local government would not receive revenues.



Business Model 5: Non Profit Owned and Privately Operated (by a 501 (c)(6) corporation)

Advantages:

- Not open to criticism for taking business opportunities away from private enterprise.
- The local government does not incur any expense to build, repair, staff, or maintain the network.
- The network will exist for the public good without regard for private, for-profit interests.
- May involve regional area coverage through collaboration with the county and other local governments.

Disadvantages:

- Time to form non profit will slow the process.
- Removes control from the local government.
- Local government would likely be required to pay for use.
- Local government would not receive revenues.

Business Model 6: Privately Owned and Operated with Revenue Sharing

Advantages:

- The local government does not incur any expense to build, repair, staff, or maintain the network.
- May involve regional area coverage through collaboration with the county and other local governments.
- Local government would receive limited revenues.

Disadvantages:

- Removes control from the local government. Vendor decides its own rates and service area (potentially increasing the digital divide).
- Local government would have to pay for use of the network, most likely a per user fee.

Funding broadband projects

Many local governments have initiated broadband projects with the notion that ISPs will give them free Internet access in return for providing public assets to house technology equipment. This is not always the case, and local governments should not limit their technology



options based on an offer for reduced cost service. Here are some potential options for funding:

Option 1: Local government can buy and own the network and have someone else operate it.

Option 2: Get grant money to pay for the network. Funding opportunities exist, like Homeland Security grants for public safety use of the network; grants to fund educational, training and digital inclusion portions of the network, and state and federal grants for economic development projects. The Genesse County Wireless recently received a \$125,000 planning grant from the Charles Stewart Mott Foundation. Communities may want to hire a consultant to identify what grants are available.

Option 3: Find corporate sponsors or look for unique organizations that leverage local experimentation and innovation for economic development projects.

Option 4: Public/private partnerships can bring local governments together with private business who can deploy broadband communications. There are many models for public/private partnerships, and local governments may be able to:

- license operations to a solutions provider, which then sets the benchmarks to meet the basic requirements of the license agreement,
- lease capacity on existing wireline infrastructure (fiber) to local ISPs,
- partner with service providers who have already laid fiber, or
- deploy across public utilities with existing wireline and wireless infrastructure.

Option 5: The Michigan Townships Association Legal Counsel believes that money paid to communities through the Michigan METRO Act can be used for laying fiber in the road rights-of-way as long as it is not for commercial use and is not competing with private companies. Local governments can also use general fund money, revenue bonds, millages, and unrestricted cable franchise fees.



Request for proposals

Issuing a request for proposal (RFP) is a decision to be made locally and is not required by state or federal laws. Some local governments may have formal policies in place that would require an RFP to be issued. Make sure to check with your local government for any requirements that may need to be met for a project of this size, especially for financial reasons.

Included in Appendix D are Web links to sample RFPs from local government projects in Michigan. RFPs will differ based on local needs, the types of community partners, and local assets available. The RFP should identify the communities specific needs and allow the local vendors to offer solutions. Professional consultants can help write the RFP and legal advice should be sought before signing any contracts with vendors.

Sample questions to ask vendors

Below is a brief list of questions to ask potential vendors:

- Is your wireless service provided in licensed or unlicensed spectrum?
- What are the benefits/drawbacks of licensed or unlicensed spectrum?
- What broadband connection speeds will the end customers receive, up and down?
- Do you offer different levels of service?
- How long has your company been in business?
- How many client/subscribers do you have?
- Do you offer 24/7 technical phone support?
- Is your system scalable for additional customers?
- What type of marketing plan do you have to increase customer base?
- What is your response plan to network-related issues?
- Does your technology require an on-site installation? If so, how much does your customer premise equipment (CPE) cost?
- What are your monthly pricing structures and how do you bill your services?
- Can your company afford the project and what happens later if you can't provide service?



• Do you have software to predict coverage?

Sample questions ISP vendors may ask you

- What is your community's market potential for households?
- What public assets are available?
- What public services or educational needs do you have?
- What is community's willingness to accept additional towers?
- What broadband services do local businesses need?
- How willing is the local government to spend money on broadband?

Risks

As with any project, there are risks associated with broadband development, such as the vendor going out of business. Any contract between vendors and a local government should include terms to protect the government's investment, such as having the project revert to the local government.

Local governments may want to hire an experienced consultant who knows how to build a broadband community action plan. Local governments can also build a pilot project, a few blocks or a few miles, before deploying a full network. This can provide a sense of how long it will take to deploy the entire project, how well the broadband teams work together, what kind of logistical problems you might encounter, and how the network is used and performs.

The Michigan Telecommunication Act, PA 179 of 1991 outlines provisions that local governments need to be



aware of before beginning any type of broadband project. The METRO act provides that all local governments that want to provide telecommunications services must issue an RFP and can only provide the service if less than three qualified bids from a private provider are received. Turn to Appendix E for Section 252 of the METRO act for further details.

Appendix A:

Check list for bringing broadband Internet to your community or local government

Appendix B:

Example community uses for broadband

Appendix C:

Government broadband resources on the Web

Appendix D:

Sample Web links to broadband RFPs

Appendix E:

Michigan Telecommunication Act Rewrite - Sec. 252



Appendix A:

Checklist for bringing broadband Internet to your community or local government

Checklist and Reference Guide

Goals of the Broadband Network (Check all that apply and list goals not listed here)	
 Improve public safety services Increase digital inclusion Improve educational opportunities Increase government productivity and services Generate more economic development Strengthen community health and quality of life Advance health care Encourage local tourism Provide mobile and field computing Provide community wireless hot spots 	
Other goals for providing broadband services?	
Potential Community Stakeholders and Investors Government Incumbents	;
Police, Fire and EMS Libraries Schools and college/universities Hospitals	
Residents Community non profit groups Businesses Chambers of commerce	
Other stakeholders to be included:	

Community "champions" that might help __ Elected officials __ Government employees ___ Business owners __ Chambers of commerce __ Non profit organizations, foundations __ Community leader, retired officials __ Downtown development authorities __ School and university officials ___ Hospital/medical administrators Other community members not listed here: **Ideas for building community consensus** Build framework with measurable benefits __ Hold a community meeting, ask for input __ Create brochures/flyers __ Contact local media (TV and newspapers) __ Notify civic and service organizations Direct mailing to residents, business and local stakeholders __ Talk to local schools, colleges Research and data collection (Check off as completed and add additional data required, parts of this will be based on community survey or other method of analysis) **Focus groups** Establish a focus group to define the community needs

_ Town Meeting

Hold a town meeting to further involve the community and ask for suggestions and volunteers

_ Community survey

Mail a survey to all residents, businesses and stakeholders.



Size of the Network: Number of square miles:			
Street/road boundaries:	_		
Attach map of area to be served			
ist of local Internet service providers identify companies with contact information, include cable and elephone companies			
Inventory of Assets .and or Structures to provide telecommunication infrastructure Water towers Radio/cell towers Buildings Street lights (are they powered 24/7?) Sewers Public rights-of-ways Cemeteries Parks and recreation areas Signs and billboards Utility poles Farm structures like silos and grain elevators Old fire towers			
Other assets not listed here:			

0	tential partners to leverage existing infrastructure
	Businesses
	Utility companies
	Private property owners, farmers
	Schools
	Hospitals
	Local governments (county, city, village and township) Federal and state resources
	Other potential partners not listed here:
	
	Household density:
	Number of households per square mile in network area
	Willingness of residents to pay:
	How much per month?
	Adoption rate for households:
	Estimated number who would purchase broadband



Community Uses for Broadband

- Cedar Rapids, IA: Passengers on public buses can surf the Web. Also, the bus driver can view surveillance cameras and even hit a silent alarm that dispatches video wirelessly to the nearest patrolling officer.
- Buffalo, MN: Citizens can log on to a site and request a work order (such as filling a pot hole), which is dispatched wirelessly to the nearest field worker.
- Providence, R.I.: Police officers and medical responders get real-time access to suspect profiles and medical records and a firefighter can access the floor plan of a building that is on fire.
- New Orleans, LA: Wireless technology helps inspectors complete tasks more efficiently in the field. New Orleans is processing 3,000 permit-related inspections of stormdamaged homes each day thanks to the wireless network. This network was originally built for and is still used for Police video surveillance.
- Corpus Christi, TX: Their entire network was built for wireless meter reading and has subsequently been used by most other city services.
- Sacramento, CA: Sacramento's Department of Public Works is responsible for roughly 2,300 municipal vehicles the police cruisers, fire and garbage trucks, street cleaners, animal control vehicles, the random tractor or 18-wheeler, and others. They are using RFID tagging to monitor their inventory.
- Houston, TX: Houston is building a Wi-Fi network to handle credit card payments from new parking meters.
 They say that building the network will save them money over other alternatives.



Web Resources for Local Governments

Several Web sites below also publish monthly or quarterly magazines and electronic newsletters and provide free subscriptions to local governments.

MuniWireless

http://muniwireless.com

Government Technology Digital Communities http://www.govtech.net/digitalcommunities

LastMile

http://www.lastmileonline.com/index.htm

Public Technology http://www.pti.org/

USDA Rural Development

http://www.usda.gov/rus/telecom/

Rural Broadband Coalition

http://www.ruralbroadbandcoalition.net

Rural Communication Congress http://www.ruraltelecon.org/dp/

Federal Communications Commission

http://www.fcc.gov/broadband/

Michigan Townships Association http://www.michigantownships.org

State of Michigan, Office of Technology Partnerships

http://www.michigan.gov/dit



Michigan Communities

City of Grand Rapids:

http://www.ci.grand-rapids.mi.us/index.pl?page_id=3928

Oakland County:

http://www.oakgov.com/wireless/info_pub/

Washtenaw County:

http://wireless.ewashtenaw.org/

Genesse Wireless:

http://www.wirelessgenesee.org/rfp_form.html

Other Community RFPs:

Winston-Salem North Carolina http://www.winstonnet.org/wireless_initiative/documents/rfp.doc

Government Technology Digital Communities http://www.govtech.net/digitalcommunities

www.google.com search on broadband rfp



ARTICLE 2A LOCAL UNITS OF GOVERNMENT

Sec. 252. (1) A public entity may provide telecommunication services within its boundaries if the public entity has complied with the requirements of section 14 of the metropolitan extension telecommunications right-of-way oversight act, 2002 PA 48, MCL 484.3114, and all of the following apply:

- (a) The public entity has issued a request for competitive sealed bids to provide telecommunication services.
- (b) The public entity has received less than 3 qualified bids from private providers.
- (c) It is more than 60 days from the date the request for bids was issued.
- (d) The public entity is providing the telecommunication services under the same terms and conditions as required under the request for bids issued pursuant to subdivision (a).
- (2) Except as provided under subsection (3), a public entity shall not provide telecommunication services outside its boundaries.
- (3) Two or more public entities may jointly request bids under subsection (1) and provide telecommunication services if all participating public entities meet the requirements of this section. If a public entity does not receive a qualified bid as required under subsection (1), the public entity may contract with another public entity to receive telecommunication services.
- (4) A public entity shall not establish a board or other entity for the purpose of providing regulation of a private provider of services under this section.
- (5) This section does not apply to all of the following:
 - (a) Public safety systems.
 - (b) Systems used only for the internal use of the public entity or for the sharing of information between the public entity and another public entity.



- (c) A public entity that is currently providing telecommunication services or that has held a public hearing by November 1, 2005 on a proposal to provide telecommunication services, or has issued a request for bids *Compiled by MPSC Staff on January 1st, 2006* 15 Michigan Telecommunications Act by November 1, 2005 to provide telecommunication services, or has an enforceable contract to begin construction of a telecommunication system by November 1, 2005.
- (d) A public entity that is currently providing service in another public entity's boundaries.
- (e) Services offered by a public entity to the public within a facility owned and operated by the public entity.
- (f) Systems or services used or offered by 1 or more public entities or consortiums to advance or promote the public health, safety, and provision of e-government services.
- (6) This section may not be construed to prevent a municipally-owned utility from providing to its energy customers, either directly or indirectly, any energy related service involving the transfer or receipt of information or data concerning the use, measurement, monitoring, or management of energy services provided by the municipally-owned utility, including services such as load management or automated meter reading.
- (7) As used in this section, "public entity" means a county, city, village, township, or any agency or subdivision of the public entity.

